#### BOARD OF COUNTY COMMISSIONERS AGENDA ITEM SUMMARY

MEETING DATE: 9/21/05	DIVISION: COUNTY ADMINISTRATOR
BULK ITEM: YES	DEPARTMENT: AIRPORTS
	STAFF CONTACT PERSON: Peter Horton
AGENDA ITEM WORDING: Approval of Pu Design Services, for the Key West Internation	rchase Service Order with THC Inc. for the Noise Insulation Program Ph 5 nal Airport.
ITEM BACKGROUND: This project will be fur Facility Charge Revenue. As required by FAA	unded 95 % by the Federal Aviation Administration, and 5% by Passenger A, a copy of an Independent Estimate is attached.
PREVIOUS RELEVANT BOCC ACTION: Ap	oproval to submit PFC Application # 9 to the FAA, August 18, 2004.
CONTRACT/AGREEMENT CHANGES: Nev	w PSO
STAFF RECOMMENDATION: Approval	
TOTAL COST: \$683,439.00 COST TO AIRPORT: None COST TO PFC: \$34,171.95 COST TO COUNTY: None	BUDGETED: Yes SOURCE OF FUNDS: FAA & PFC Revenue
REVENUE PRODUCING: No	AMOUNT PER MONTH /YEAR:
APPROVED BY: County Attorney X Of	MB/Purchasing N/A Risk Management N/A
AIRPORT DIRECTOR APPROVAL	Peter J. Horton
DOCUMENTATION: Included X	Not Required
	AGENDA ITEM #
DISPOSITION:	
/bev	

## MONROE COUNTY BOARD OF COUNTY COMMISSIONERS

#### CONTRACT SUMMARY Contract # Contract with: THC Inc. Effective Date: Execution Expiration Date: 500 days Contract Purpose/Description: Design services for the Noise Implementation Program Ph V design Contract Manager: Bevette Moore # 5195 Airports - Stop # 5 (name) (Ext.) (Department/ Stop) for BOCC meeting on: 9/21/05 Agenda Deadline: 9/6/05 **CONTRACT COSTS** Total Dollar Value of Contract: \$683,439.00 Current Year Portion: ~\$8,000.00 Budgeted? Yes Account Codes: 404-630108-GAKA105 Grant: Yes - FAA County Match: PFC Revenue ADDITIONAL COSTS Estimated Ongoing Costs: None For: . (not included in dollar value above) (eg. maintenance, utilities, janitorial, salaries, etc.) **CONTRACT REVIEW** Changes Date In Needed Reviewer Date Out Yes No 97405 Airports Director ()(x+ 8,2405 Peter Horton Risk Management NIA DO OMB ()()for Risk Management O.M.B./Purchasing ()()NIA POLOMB for QMB County Attorney dro Mencado ()()County Attorney

Comments:

## PROFESSIONAL / SERVICE ORDER

#### FOR

### MONROE COUNTY

Resolution No.
on Program – (Phase 5 Design Services)
pe of Services)
Reimbursable Expense
Fee this Service Order \$683,439.00
Recommended by:
Toletone
Date: 8-23-05
Approved by:
*
Date:  MONROE COUNTY ATTORNEY APPROVED AS TO FORM:

PEDRO J. MERCADO ASSISTANT COUNTY ATTORNEY

Task No.	Task Description	Lump-Sum Amount
1	Project Management	\$156,664.00
2	Maintain Project Office and Provide Information to the Public	\$7,208.00
3	Update Program Policies	\$8,384.00
4	Contractor Outreach, Certification & Training	\$21,872.00
5	Legal Document Administration	\$39,664.00
6	Construction Specification Revision	\$20,830.00
7	Product Review	\$8,344.00
8	Document Architectural, Mechanical, Ventilation & Electrical	\$114,648.00
9	Perform Pre-modification Noise Audit	\$10,750.00
10	Develop Acoustic Design Package	\$77,051.00
11	Design Review with Homeowners	\$46,918.00
12	Develop Bid Documents	\$54,198.00
13	Requests for Bids	\$6,012.00
14	Conduct Pre-Bid Conference	\$13,224.00
15	Open & Evaluate Bids	\$4,752.00
	Reimbursable Expenses	\$92,920.00
	TOTAL PSO #4 BUDGET	\$683,439.00

# PHASE 5 SCOPE OF SERVICES IMPLEMENTATION OF NOISE INSULATION PROGRAM KEY WEST INTERNATIONAL AIRPORT

This Phase 5 Scope of Services will describe tasks necessary to implement the Noise Insulation Program for up to 60 eligible homes. As in the Phase 4 Design project, there will be 60 homes included in this phase with the goal of finalizing the phase with a minimum of 50 homes in the bid award. The services will include preliminary tasks through bid tabulation and award. This scope differs from Phase 4 Design in three areas:

- 1) We have added a week to the design visits, which adds preparation time, and actual time in participating homes for numerous consultant team members,
- 2) Consequently, we also had to add a week to the design review meetings that also take place in the participating homeowners houses, and
- 3) THC added the services of an Assistant Project Manager to help our Project Manager and Director of Sound Insulation Services with the associated administrative tasks that must take place from the Atlanta headquarters office.

The THC Director of Sound Insulation Programs is the ultimate party of responsibility for THC, Inc., and will provide program management consultation throughout the project. The Consultant Team will be directed on a daily basis by a THC Project Manager who will report directly to the Key West International Airport's Noise Program Coordinator and the THC Director of Sound Insulation Programs. The THC Project Manager will be supported by an Assistant Project Manager from the THC Atlanta headquarters office.

The Consultant Team is composed of the following disciplines. Their billable rates are shown in parenthesis:

- THC, Inc. The Program Manager, THC, Inc. (THC) will provide overall program management services and support to the Airport Noise Program Coordinator as necessary. THC will provide database services and project scheduling, along with interaction with all participating property owners and tenants. The Director of Sound Insulation Programs (\$182.00) will have overall responsibility for the project and provide master planning, document review and development, scheduling and overall program management throughout the project. THC will also assign a Project Manager (\$102.00) to the project for the entire phase, which will travel back and forth from Atlanta to Key West throughout the program. THC will also utilize the services of an Assistant Project Manager (\$68.00) for administrative support from the Atlanta headquarters office.
- Miller-Dunwiddie Architects For architectural services, THC will utilize Miller-Dunwiddie (MDA) for architectural project lead and management (Lead Architect), as they did in the Phase 4 Design project. MDA will work with The Sun Group, a Florida based DBE architectural firm (Local Architect) for the majority of daily operations such as plan and document development. The term

- Project Architect is used to describe all architectural services, which includes both firms. MDA will utilize the services of a Project Manager (\$190.00), Construction Administrator (\$90.00), the Principal Architect (\$175.00), and a Specifications Writer (\$150.00).
- The Sun Group The local Project Architect, The Sun Group, will provide the majority of all required architectural services for this project. The SUN Group will be responsible for preparing the construction specifications, preparing any necessary architectural details, assuring compliance with all applicable codes and ordinances, performing design visit inspections at each home, developing draft design packages for each home, reviewing draft design packages with each homeowner, developing final design packages for each home, preparing the bid package, leading the pre-bid conference, attending all contractor outreach sessions and workshops where necessary, tabulating the bids for construction services, and making the final award recommendation to THC. The Sun Group will utilize the services of the Principal Architect (\$130.00), Mechanical Engineer (\$100.00), Assistant Architect (\$60.00) CADD Technician (\$42.00) and clerical support (\$30.00).
- <u>Landrum & Brown</u> The Acoustical Engineer, Landrum & Brown (L&B) will provide pre-modification noise testing in 6 homes (10% of the 60 homes sound insulated). L&B will utilize a Senior Consultant (\$210.00), two Consultants (both rates are \$140.00) and an Administrative Assistant (\$65.00) on this project.
- <u>First American Title</u> First American Title will provide all services associated with securing avigation easements and recording said easements on the titles of the subject properties. The consultant team will process and secure consent agreements as allowed from mortgage holders for an avigation easement relative to the title of the properties.
- Center for Energy & Environment (CEE) The Ventilation Consultant (CEE) will attend the Design Visit at each home to identify moisture concerns, document the location and operation of existing air conditioning systems, determine if house pressure changes exist due to air handler operation and flow from supply registers, record digital pictures of key house features and assist Project Architect in determining if there are pre-existing deficiencies present. CEE will assess current conditions within the homes and determine the impact that will be created by tightening the homes via the installation of acoustic treatments. The ventilation consultant will provide ventilation design services to assist the Project Architect during the design development phase. In addition to attending the Design Visit with the Project Architect, the Ventilation Consultant will provide supplements to the architectural designs with ventilation modifications, where necessary. CEE will utilize the services of a Ventilation Engineer (\$150.00), a Ventilation Manager (\$115.00) and a Senior Ventilation Technician (\$100.00) to provide these services.

## **Travel Summary**

This section explains the travel budgeting for the THC Consultant Team. Each task has a travel section following the task description where appropriate. If there is no travel section following a task description, then there is no travel planned for this task. The following information explains the number of trips planned and the allotted days, nights and budgeted costs for each member of the various companies represented on the consultant team.

THC has budgeted twelve (12) trips for the Project Manager and four (4) trips for the Director of Sound Insulation Programs, for a total of sixteen (16) trips. Where other tasks require trips for the Project Manager, they will be absorbed into the 12 trips budgeted so that more than one task can be addressed by the Project Manager during the same trip. All trips budgeted for THC are scheduled as non-stop, round trip flights from Atlanta, GA to Key West, FL. Round trip airfare is budgeted at \$750.00 per flight. Hotel accommodations are budgeted at \$140.00 per night. Auto rental is budgeted at \$40.00 per day. Per deim is budgeted at \$40.00 per day. For THC employees traveling to Key West from Hartsfield-Jackson Atlanta International Airport, the parking fee at the airport is \$9.00 per day. There are no trips budgeted for the Principal, Assistant Project Manager or Director of Administrative Services for THC.

MDA has budgeted four (4) trips for their Project Manager and one (1) trip for their Construction Administrator. All trips budgeted for MDA are scheduled from Minneapolis, MN to Key West and budgeted at \$1,400.00 per flight. Hotel accommodations are budgeted at \$140.00 per night. Auto rental is budgeted at \$40.00 per day. Per deim is budgeted at \$40.00 per day. For MDA employees traveling to Key West from Minneapolis-St. Paul International Airport, the parking fee at the airport is \$14.00 per day. There are no trips budgeted for the MDA Principal Architect or Specifications Writer.

The Sun Group will travel back and forth to the project site by automobile. Travel is from West Palm Beach, FL. There is a total of 10 automobile trips budgeted for this phase at a cost of \$250.00 per trip for associated travel expenses. Hotel accommodations are budgeted at \$140.00 per night for a total of sixty-nine (69) nights. Since The Sun Group employees are driving to Key West, there is no auto rental budgeted. Per deim charges are budgeted however at \$40.00 per day for seventy-nine (79) days. Personnel traveling for the Sun Group include the Principal Architect, the Mechanical Engineer, and the Assistant Architect. There are no travel expenses included for The SUN Group CADD Technician or clerical support person.

CEE has budgeted for eight (8) trips for this project. These are comprised of two (2) trips for the Ventilation Manager and six (6) trips for the Ventilation Technician. All trips budgeted for CEE are scheduled from Minneapolis, MN to Key West and budgeted at \$1,400.00 per flight. These trips are all planned as four (4) night, five (5) day stays. Hotel accommodations are budgeted at \$140.00 per night for a total of 32 nights. Auto rental is budgeted at \$40.00 per day for a total of 40 days. Per deim is budgeted at

\$40.00 per day for a total of 40 days. There are no trips budgeted for the Ventilation Engineer for CEE.

The Acoustical Engineer, Landrum & Brown, has budgeted for one (1) trip for two (2) employees (total of two (2) trips) for pre-modification noise testing in the field. These two employees (Consultant 1 and Consultant 2) will spend two (2) nights and three (3) days in Key West. All trips budgeted for Landrum & Brown are scheduled from Boston, MA to Key West and budgeted at \$750.00 per flight. Hotel accommodations are budgeted at \$140.00 per night. Auto rental is budgeted at \$70.00 per day (only one vehicle budgeted for both Consultants) due to the L&B employees needing a van to accommodate the noise testing equipment. Per deim is budgeted at \$40.00 per day for each Consultant. There are no trips budgeted for the L&B Senior Consultant or the Administrative Assistant.

Travel Summary for the Project

Company	Position	No. of Trips
THC	Director of Sound Insulation Programs	4
THC	Program Manager	12
MDA	MDA Project Manager	4
MDA	Construction Administrator	1
Sun Group	Principal Architect & staff (by automobile)	10
CEE	Project Manager	2
CEE	Ventilation Technician	6
L&B	Consultant 1	1
L&B	Consultant 2	4

## Additional Expenses

Also included in the expense budget for L&B are expenses associated with their noise testing equipment. These include the fee for use of their noise testing equipment, the LD824, at \$200.00, and the shipping expenses associated with transporting this equipment at \$280.00.

Also included in the expense budget for THC, The Sun Group, CEE and MDA, are CO Monitors for each house (60) at a cost of \$45.00 apiece, printing, postage, conference room rental for contractor outreach sessions (two), bid advertisement fees, long distance telephone charges, copying fees and shipping costs.

#### **Project Tasks**

## TASK 1 PROJECT MANAGEMENT

The THC Project Manager will perform general project-related management and coordination with the Airport Noise Program Coordinator. This task includes preparation of monthly invoices and progress reports, FAA coordination, project management plan updates, sub-consultant coordination and agreements, and schedule updates. This task also includes conference calls with the Consultant Team and related documentation. The Project Architect, Title Company, Ventilation Consultant and Acoustical Engineer will perform general project-related coordination with the THC Project Manager. This includes preparation of monthly invoices and progress reports, FAA coordination, and schedule updates. The THC Project Manager will travel to the project site as necessary for coordination with the participating homeowners, the airport staff, and the various members of the consultant team. The Project Manager will also provide services off-site on a continuing basis. The Assistant Project Manager will provide services throughout the Project Management task also. The Project Manager will always be available for interaction as circumstances arise.

The THC Principal will be responsible for the preparation of all sub-consultant invoices, the development of all sub-consultant contracts, and submit overall project team invoices to Monroe County. (This is the only task where time is budgeted for the THC Principal) THC's Director of Administrative Services will process all sub-consultant invoices, reports, receipts, contracts, insurance certificates, etc., throughout the project. As a result, minimal time for this person is included in each of the 15 tasks.

This task only includes time for THC personnel. This task includes 100% of the Principal's hours, approximately 83% of the Director of Sound Insulation Program's hours, approximately 49.5% of the Project Manager's hours, approximately 32.5% of the Assistant Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Principal	24	\$250.00
Director of Sound Insulation Programs	440	\$182.00
Project Manager	608	\$102.00
Assistant to Project Manager	120	\$68.00
Director of Administrative Services	4	\$102.00

Travel time for THC under this task is budgeted at four (4) nights, five (5) day stays for the Project Manager, and three (3) nights, four (4) day stays for the Director of Sound Insulation Programs, each trip. These trips will be throughout the project and address typical project related issues and duties related to the homeowners, sub-consultants and Monroe County officials.

Travel Summary for this Task

Company	Position	No. of Trips
THC	Director of Sound Insulation Programs	2
THC	Program Manager	6

## TASK 2 PROVIDE SUPPORT TO THE OFFICE AND PROVIDE INFORMATION TO THE PUBLIC AS REQUIRED

The THC Project Manager and Assistant Project Manager will answer inquiries from, and provide information to, the public, the media, and the County as appropriate. They will support the Noise Insulation Program Coordinator in conducting daily program implementation. The Project Manager will accompany the Noise Program Coordinator on homeowner visits as often as possible, and at the discretion of the Airport Noise Program Coordinator, as long as these visits coincide with the Project Manager's travel schedule relative to the program budget. Likewise, the THC Project Manager will attend the airport's Ad-Hoc Committee meetings on Noise as directed by the Airport Noise Program Coordinator to provide status reports on the progress of the Noise Insulation Program and other related matters during the term of this phase.

Examples of noise insulation materials, such as different window and door assemblies, will be available in the Project Office for inspection along with photographs of completed work, product brochures and application forms. The THC Project Manager and/or the Principal Architect's Assistant Architect will schedule appointments as needed to meet with Homeowners in the Project Office to view and discuss the product displays. These appointments will coincide with other project-related trips to Key West.

This task includes approximately 3% of the Project Manager's hours, approximately 11% of the Assistant Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Project Manager	40	\$102.00
Assistant to Project Manager	40	\$68.00
Director of Administrative Services	4	\$102.00

There is no travel associated with this task.

#### TASK 3 UPDATE PROGRAM POLICIES

The THC Project Manager will update the programs policies that describe the step-bystep process for the Key West International Airport Noise Insulation Program. All revisions to forms and or presently used contracts and documents will be included in the update. THC will also utilize CEE to review ventilation policies and update them with changes in standards and regulations accordingly.

This task includes approximately 5% of the Director of Sound Insulation Program's hours, approximately .5% of the Project Manager's hours, approximately 1.5% of the Assistant Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

**Summary of Hours - THC** 

Position	Hours	Hourly Rate
Director SIP	28	\$182.00
Project Manager	8	\$102.00
Assistant to Project Manager	8	\$68.00
Director of Administrative Services	4	\$102.00

For CEE, this task includes approximately 18% of the Ventilation Engineer's hours and approximately 9% of the Ventilation Manager's hours. The summary of hours for this task is as follows:

Summary of Hours - CEE

Position	Hours	Hourly Rate
Ventilation Engineer	4	\$150.00
Ventilation Manager	8	\$115.00

There is no travel associated with this task.

## TASK 4 CONTRACTOR OUTREACH & TRAINING

The THC Project Manager will provide all necessary contractor outreach services in an attempt to maximize the number of bidding contractors. For interested general contractors, the THC Project Manager will review program processes, as well as review all program contractor requirements and expectations. The THC Project Manager will perform a review of the licenses, insurance policies and bonding capacity information for the awarded general contractor. In addition, the THC Project Manager will conduct a training session to review insulation installation, mechanical installation and window/door installation expectations. The THC Director of Sound Insulation Programs will also attend the training session and provide expertise to the contractor. The Project Manager will utilize the assistance of the Assistant Project Manager from the Atlanta headquarters office to prepare outreach material and documents for the attending contractors.

The THC Project Manager will travel to Key West for a four (4) night, five (5) day stay. The Director of Sound Insulation Programs will travel to Key West for a three (3) night,

four (4) day stay. Meetings with the Monroe County officials and the Airport Noise Program Coordinator may be scheduled and held during this time as necessary.

The MDA Project Manager will also travel to Key West for a one (1) night, two (2) day trip for the contractor outreach and training. As time permits, the MDA Project Manager may also attend any scheduled meetings with the Monroe County officials and the Airport Noise Program Coordinator.

The CEE Ventilation Engineer will review all ventilation specifications and training documents to assure the most up-to-date policies and procedures for ventilation is utilized in the program. The Ventilation Manager will travel to Key West for one week to provide on-site outreach and on-site training to the contractor in proper ventilation techniques and procedures.

For THC, this task includes approximately 6% of the Director of Sound Insulation Program's hours, approximately 3% of the Project Manager's hours, approximately 11% of the Assistant Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Director SIP	32	\$182.00
Project Manager	40	\$102.00
Assistant to Project Manager	40	\$68.00
Director of Administrative Services	4	\$102.00

For CEE, this task includes approximately 36% of the Ventilation Engineer's hours and approximately 45.5% of the Ventilation Manager's hours. The summary of hours for this task is as follows:

Summary of Hours - GEE

Position	Hours	Hourly Rate
Ventilation Engineer	8	\$150.00
Ventilation Manager	40	\$115.00

For MDA, this task includes approximately 13.5% of the Project Manager's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Project Manager	16	\$190.00

Travel Summary for this Task

Company	Position	No. of Trips
THC	Director of Sound Insulation Programs	1
THC	Project Manager	1
MDA	Project Manager	1
CEE	Ventilation Manager	1 1

## TASK 5 LEGAL DOCUMENT ADMINISTRATION

The THC Project Manager will utilize the services of the THC Assistant Project Manager (APM) to communicate and coordinate with First American Title to secure title commitments for each of the participating properties. First American Title will provide an opinion of title, which would identify the vesting of ownership for the property. The opinion of title will also identify any and all mortgages, liens and encumbrances on the property, which would require signature of consent to the avigation easement and a subordination of the easement.

The THC Project Manager will utilize extensive assistance from the THC Assistant Project Manager (budgeted at 80 hours) to coordinate the activities in obtaining the consents and subordination agreements. This entails identifying the lien holder, providing the lien holder with the consent and subordination agreements, explaining the program and the lien holders' rights, and responding to any questions or concerns that the lien holder(s) may have with the consent or subordination agreements. The THC Assistant Project Manager will manage the receipt of consents and subordination agreements by tracking it in the database. Upon receipt of the executed consents and subordination agreements, the THC Project Manager will have them recorded at County records. The recording of the avigation easements should occur as soon as possible in the program process.

For THC, this task includes approximately .5% of the Project Manager's hours, approximately 22% of the Assistant Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Houriv Rate
Project Manager	8	\$102.00
Assistant Project Manager	80	\$68.00
Director of Administrative Services	4	\$102.00
	·	4104.00

100% of the charges for First American Title are included in this task.

There is no travel associated with this task.

## TASK 6 CONSTRUCTION SPECIFICATION REVISION

The THC Project Manager and the Principal Architect (MDA) will revise the current Key West International Airport Residential Sound Insulation Program construction specification document in all divisions (division zero – seventeen), especially in the areas of General Conditions, Architectural Details and Ventilation Design Requirements. MDA will utilize all staff on this task, with significant time allocated to the Specifications Writer (82 hours) and the Construction Administrator (40 hours). This work shall include revisions, as necessary, to the appendices, including:

- Appendix A Project Team Contacts
- ♦ Appendix B Approved Manufacturers & Products
- Appendix C Sample Project Forms
- Appendix D Standard Drawings & Code Index
- ◆ Appendix E Program Policy Statements

The THC Director of Sound Insulation Programs will review all revisions.

For THC, this task includes approximately 1% of the Director of Sound Insulation Program's hours, approximately .5% of the Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Director SIP	. 8	\$182.00
Project Manager	8	\$102.00
Director of Administrative Services	4	\$102.00

For MDA, this task includes approximately 28.5% of the Principal Architect's hours, approximately 8.5% of the Project Manager's hours, approximately 63% of the Specifications Writer's hours, and approximately 23% of the Construction Administrator's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Principal Architect	2	\$175.00
Project Manager	10	\$190.00
Construction Administrator	40	\$90.00
Specifications Writer	82	\$150.00

There is no travel associated with this task.

#### TASK 7 PRODUCT REVIEW

The THC Project Manager and Project Architect (MDA) will conduct a thorough review of all acoustic window and door products to include:

- ♦ New product research and approval
- Shop drawing review and approval
- \* STC criteria establishment
- Revision of approved product lists

This task will require a two (2) night, three (3) day trip for the MDA Project Manager and a three (3) night, four (4) day trip for the MDA Construction Administrator. There are no trips budgeted for THC personnel under this task.

For THC, this task includes approximately .5% of the Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Project Manager	8	\$102.00
Director of Administrative Services	4	\$102.00

For MDA, this task includes approximately 13.5% of the Project Manager's hours, approximately 6% of the Specifications Writer's hours, and approximately 18.5% of the Construction Administrator's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Project Manager	24	\$190.00
Construction Administrator	32	\$90.00
Specifications Writer	8	\$150.00

Travel Summary for this Task

Company	Position	No. of Trips
MDA	Project Manager	1
MDA	Construction Administrator	1
		<u> </u>

# TASK 8 DOCUMENT ARCHITECTURAL, MECHANICAL, VENTILATION AND ELECTRICAL SITE CONDITIONS (Design Visits)

The THC Project Manager, The Sun Group Assistant Architect, Mechanical Engineer, and the CEE Ventilation Technician will inspect each property in a six (6) week period in an effort to define pre-existing deficiencies that are not eligible for program funding and/or that could complicate the proposed acoustic scope of work. These deficiencies would include pre-existing code issues, structural issues, environmental issues, moisture issues, insect infestation and safety issues. The Assistant Architect will document all pre-existing deficiencies in the field, analyze them with The SUN Group Principal Architect in the West Palm Beach office, and forward the information to the THC Project Manager for review.

During these Design Visits, the Assistant Architect, Mechanical Engineer and Ventilation Technician will also collect sufficient architectural, mechanical, ventilation and electrical data on each home to document the existing conditions for proposed treatment recommendation. At this time, general building metrics, unusual building conditions, and relevant building code conditions will be documented as a basis for future treatment recommendations and construction detailing. The Assistant Architect will photograph and, in conjunction with the Mechanical Engineer and Ventilation Technician, will prepare written documentation of the existing conditions at each residence. Detailed floor plans will be developed showing the number and location of all windows, doors, perimeter penetrations, and potential treatment areas (e.g., wall, ceiling, attic, soffit, skirting, exposed framing, etc.). Door and window schedules will elaborate types, sizes, and styles of these elements. The mechanical and electrical information will indicate the existing HVAC systems configuration and capacity. The Ventilation Technician will also document the existing ventilation (rate and method of fresh air exchange) status and determine any required ventilation modifications.

The THC Project Manager and SUN Group Assistant Architect will schedule appointments with each eligible participant for on-site design visits and will conduct these design visits to collect data on each of the homes, over the course of the six week period. As stated earlier, The SUN Group Mechanical Engineer and CEE Ventilation Technician will also participate in these design visits over the six (6) week period. The THC Assistant Project Manager will provide various administrative services relative to this task from the Atlanta headquarters office.

In meeting with the participating homeowners during these design visits, the THC Consultant Team will review the steps to participation, explain all the requisite paperwork the Homeowner must fill out in order to participate in the program, secure title and mortgage information, collect architectural data on the home, and answer specific Homeowner questions. The Consultant Team will also discuss treatment options, technical issues and other noise insulation measures with the Homeowners at during these design visits.

For THC, this task includes approximately 24.5% of the Project Manager's hours, approximately 11% of the Assistant Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

**Summary of Hours - THC** 

Position	Hours	Hourly Rate
Project Manager	300	\$102.00
Assistant to the Project Manager	40	\$68.00
Director of Administrative Services	4	\$102.00

For The SUN Group, this task includes approximately 47% of the Assistant Architect's hours, and approximately 45% of the Mechanical Engineer's hours. The summary of hours for this task is as follows:

Summary of Hours - SUN GROUP

Position	Hours	Hourly Rate
Assistant Architect	300	\$60.00
Mechanical Engineer	300	\$100.00

For CEE, this task includes approximately 94% of the Ventilation Technician's hours. The summary of hours for this task is as follows:

Summary of Hours - CEE

Position		
I VS: (IV)	Hours	Hourly Rate
Ventilation Technician	300	
	A CONTRACTOR OF THE CONTRACTOR	\$100.00

The THC Project Manager will stay in Key West for two weeks at a time, returning home for the weekend between these two week intervals. Thus the travel associated with this Task for the THC Project Manager amounts to 3 trips, each consisting of thirteen (13) nights, fourteen (14) day stays for a total of 39 nights and 42 days.

The SUN Group Mechanical Engineer and Assistant Architect will travel together by automobile each week during the six (6) week design visit period. Thus this will amount to 6 trips by automobile and six (6) four (4) nights, five (5) day stays for each person for a total of 48 nights and 60 days combined for these two SUN Group employees.

The CEE Ventilation Technician will also travel home each weekend during the six (6) week design visit period. This will equate to six (6) trips, each made up of four (4) nights and five (5) days for a total of 24 nights and 30 days.

Travel Summary for this Task

Company	Position	No. of Trips
THC	Project Manager	3
SUN Group	Assistant Architect (automobile)	6
SUN Group	Mechanical Engineer (automobile)	6
CEE	Ventilation Technician	6

## TASK 9 PERFORM PRE- MODIFICATION NOISE AUDIT

Immediately following the architectural survey developed from the design visits, the Acoustical Engineer (L&B) will conduct a pre-modification noise audit of selected homes. Measurements will be used to verify the necessity for modifications identified during the design process. Pre-modification data will be compared with post-modification measurements to document the achieved increase in noise reduction, and as a check on quality control. Pre-modification measurements will be used to consult with the Consultant Team on treatment protocols.

The number of homes to be measured will be approximately 10% of the total number of homes being insulated in Phase 5. The sample will be selected to represent the range of housing types expected. Usually, each home that is measured before construction will be measured afterwards as well.

The noise level reduction (NLR) measurements essentially consist of placing a loudspeaker inside each of the rooms that will be measured. The electrical signal of a pink noise source is fed through the amplification/loudspeaker system and is filtered to simulate aircraft noise. The technician will measure the average interior sound level within the room and the sound level directly outside each exterior element (i.e., doors, windows, and walls). An overall NLR will be mathematically computed based on the measured test data and the acoustical conditions of each room.

For L&B, this task includes approximately 67% of the Senior Consultant's hours, approximately 92% of the Consultant 1's hours, 100% of the Consultant 2's hours, and 50% of the Administrative Assistant's hours. The summary of hours for this task is as follows:

Summary of Hours - L&B

Position	Hours	Hourly Rate
Senior Consultant	4	\$205.00
Consultant 1	44	\$140.00
Consultant 2	26 .	\$140.00
Administrative Assistant	2	\$65.00

Travel Summary for this Task

289	y ioi amo i aok	
Company	Position	No. of Trips
L&B	Consultant 1	1
L&B	Consultant 2	1

## TASK 10 DEVELOP ACOUSTIC DESIGN PACKAGE

This task involves the interaction of all consultant team members except First American Title.

The Acoustic Design Package documents existing conditions, floor plans and miscellaneous items that are to be incorporated into the design documents. It also contains the recommended acoustical treatments to the windows, doors, ceilings, and walls. The acoustical designs will be aimed at achieving the FAA Handbook minimum reduction goal of 5 decibels goal and/or an interior noise level no greater than 45 dB DNL.

The Project Architect (SUN Group) will develop the noise insulation designs (for up to 60 homes) in full compliance with the policies, standards, and specifications issued by the FAA for AIP projects with oversight from MDA. The Acoustic Design Package will include the following information:

- General Requirements,
- Elevation Photographs,
- Special Requirements,
- Structural Description.
- Contractor General Notes,
- Homeowner Requirements,
- Schematic Architectural Plans,
- Schematic Mechanical Plans,
- Schematic Electrical Plans,
- Product Selection Icons,
- Door and Window Schedules.

The SUN Group will utilize all of their billable personnel during this task. The Principal Architect will oversee the development of the design packages, using 88 hours or 22% of their overall allotted time. This task will require a major time commitment from the CADD Technician (approximately 69% of the hours budgeted for the CADD Technician, or 415 hours). It will also require 281 hours (44%), of the time allotted to the Assistant Architect. The Mechanical Engineer will also use 62 hours (10%) of their allotted time during this task. The SUN Group Principal Architect will develop and distribute the Design Packages to the Consultant Team for internal review and discussion.

MDA will also review the design packages and provide input from the Principal Architect (3 hours), Project Manager (30 hours), Construction Administrator (56 hours) and Specifications Writer (12 hours).

CEE will expend the balance of their hours from each employee on this task.

Likewise, L&B will also expend the balance of their hours on this task. They will utilize the Senior Consultant, the Consultant 1 and provide clerical work from the Administrative Assistant relative to the noise reduction qualities of the acoustic recommendations. Since we have an ongoing knowledge of the typical acoustical improvements required for the Key West homes, this is a minimal requirement of L&B, and therefore only needs a few hours for review and input (the balance of their allotted hours).

Following internal review and revision from all consultant team members, the THC Project Manager will meet with the Airport Manager and/or Airport Noise Program Coordinator to review the Acoustic Design Packages and discuss any outstanding issues as necessary. The MDA Project Manager and CEE Ventilation Technician will attend the meetings as required for explanation of technical issues that may need clarification. Any necessary revisions to the Acoustic Design Packages will be completed by the THC Consultant Team prior to formal presentations (design review meetings) to the Homeowners.

For THC, this task includes approximately 2% of the Project Manager's hours and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Houriv Rate
Project Manager	24	\$102.00
Director of Administrative Services	4	\$102.00

For The SUN Group, this task includes approximately 22% of the Principal Architect's hours, approximately 44% of the Assistant Architect's hours, approximately 10% of the Mechanical Engineer's hours, and approximately 69% of the CADD Technician's hours. The summary of hours for this task is as follows:

Summary of Hours - SUN GROUP

Position	Hours	Hourly Rate
Principal Architect	88	\$130.00
Assistant Architect	281	\$60.00
CADD Technician	415	\$42.00
Mechanical Engineer	62	\$100.00

For CEE, this task includes approximately 46% of the Ventilation Engineer's hours, approximately 45.5% of the Ventilation Manager's hours, and approximately 6% of the Ventilation Technician's hours. The summary of hours for this task is as follows:

Summary of Hours - CEE

Position	Hours	Hourly Rate
Ventilation Engineer	10	\$150.00
Ventilation Manager	40	\$115.00
Ventilation Technician	20	\$100.00

For L&B, this task includes the remaining 33% of the Senior Consultant's hours, the remaining 8% of the Consultant 1's hours, and the remaining 50% of the Administrative Assistant's hours. The summary of hours for this task is as follows:

Summary of Hours - L&B

Position	Hours	Hourly Rate
Senior Consultant	2	\$205.00
Consultant 1	4	\$140.00
Administrative Assistant	2	\$65.00

For MDA, this task includes approximately 43% of the Principal Architect's hours, approximately 25% of the Project Manager's hours, approximately 9% of the Specifications Writer's hours, and approximately 32% of the Construction Administrator's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Principal Architect	3	\$175.00
Project Manager	30	\$190.00
Construction Administrator	56	\$90.00
Specifications Writer	12	\$150.00

The MDA Project Manager and CEE Ventilation Manager will each travel to Key West for a three (3) night, four (4) day stay.

Travel Summary for this Task

Company	Position	No. of Trips
MDA	Project Manager	1
CEE	Ventilation Manager	1

## TASK 11 DESIGN REVIEW WITH HOMEOWNERS

Over a three (3) week period, The THC Project Manager and SUN Group Principal Architect will review the Acoustic Design Package with each Homeowner (up to 60 homes) on site at the participating homes. They will explain all treatment recommendations and product selections such as color, style, and material. Any changes proposed by the Homeowner will be reviewed by the Consultant Team prior to approval. Issues arising from Homeowners' refusal of proposed treatments will be addressed according to program policies. During this visit, the THC Project Manager will also review the legal documents with the Homeowner. This task will also require much preparation from the THC Project Manager and the SUN Group Principal Architect in advance of the actual design review meetings. The THC Project Manager will utilize the services of the Assistant Project Manager from the Atlanta headquarters office during this preparation period.

The THC Project Manager and SUN Group Principal Architect will schedule appointments with the Homeowners to present the Acoustical Design Packages. In the event of required revisions, the Principal Architect will make all changes and develop the final Design Package by utilizing his Assistant Architect and CADD Technician. The SUN Group Principal Architect will also utilize their clerical support during this task.

For THC, this task includes approximately 10.5% of the Project Manager's hours, approximately 11% of the Assistant Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Project Manager	120	\$102.00
Assistant to Project Manager	40	\$68.00
Director of Administrative Services	4	\$102.00

For The SUN Group, this task includes approximately 51% of the Principal Architect's hours, approximately 4.5% of the Assistant Architect's hours, approximately 10% of the CADD Technician's hours, and 100% of the clerical support hours. The summary of hours for this task is as follows:

Summary of Hours - SUN GROUP

Position	Hours	Hourly Rate
Principal Architect	206	\$130.00
Assistant Architect	30	\$60.00
Clerical Support	15	\$30.00
CADD Technician	60	\$42.00

The THC Project Manager will stay in Key West for the entire three (3) week design review period. Thus the travel associated with this Task for the THC Project Manager amounts to 1 trip, consisting of twenty (20) nights and twenty-one (21) days.

The SUN Group Principal Architect will travel by automobile each week during the three (3) week design visit period. Thus this will amount to 3 trips by automobile, each consisting of four (4) nights, five (5) day stays for the Principal Architect, total of twelve (12) nights and fifteen (15) days.

Travel Summary for this Task

Company	Position	No. of Trips
THC	Project Manager	Towns.
SUN Group	Principal Architect (automobile)	3

#### TASK 12 DEVELOP BID DOCUMENTS

The consultant team will develop a complete set of construction documents that meet all FAA requirements and the requirements of the local authorities. The construction documents will include written specifications that describe the products, suppliers, materials, and workmanship that are acceptable and which meet the technical requirements of the project. The construction documents will also include the plans and details referenced to the specifications sections. The documents will be of sufficient detail to be used for the formal bid process as well as for the actual construction phase of the work.

Once all of the Homeowners in Phase 5 have signed-up (or declined to participate) the Principal Architect will compile all of the Acoustic Design Packages for those properties included in the bid package.

The bid package set will contain at least the following information for each residence:

- Floor plan that shows the existing construction and modifications that shall be made for each habitable level and the roof plan;
- Door and window schedules that are keyed to identifying marks on the floor plans and that call out the specific modifications that are required, complete with elevation drawings of typical doors and windows;
- HVAC upgrade requirements including ventilation capacity and electrical capacity; and
- Detailed drawings of special installation techniques required for windows, doors, and other elements.

 Required construction time period, limitations for simultaneous construction, performance requirements and completion requirements

The task is comprised primarily of Project Architect time from both MDA and The SUN Group (majority of time coming from The SUN Group). The SUN Group Mechanical Engineer will provide detailed specifications for each house (300 hours), and the CADD Technician will utilize the majority of his time (120 hours) developing the drawings during this task.

The MDA Principal Architect will provide review expertise as needed, the MDA Project Manager and MDA Construction Administrator will review and consult on all bid documents, and the MDA Specifications Writer will consult on the bid documents as needed.

The THC Project Manager will provide the general requirements, wage rates, labor policies, and other legally required contractual documents in accordance with Monroe County protocols for inclusion in the Project Manual. The THC Director of Sound Insulation Programs will consult with the consultant team on this task as needed. The SUN Group Principal Architect will develop construction documents that meet applicable requirements, including bid forms, special provisions, technical specifications, house plans, equipment schedules, and details.

The Phase 5 design work will produce one bid package containing up to 60 homes.

For THC, this task includes approximately .5% of the Director of Sound Insulation Program's hours, approximately .5% of the Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Director SIP	2	\$182.00
Project Manager	8	\$102.00
Director of Administrative Services	4	\$102.00

For The SUN Group, this task includes approximately 17% of the Principal Architect's hours, approximately 4.5% of the Assistant Architect's hours, approximately 45% of the Mechanical Engineer's hours, and approximately 20% of the CADD Technician's hours. The summary of hours for this task is as follows:

Summary of Hours – SUN GROUP

Position	Hours	Hourly Rate
Principal Architect	68	\$130.00
Mechanical Engineer	300	\$100.00
Assistant Architect	30	\$60.00
CADD Technician	120	\$42.00

For MDA, this task includes the remaining 28.5% of the Principal Architect's hours, approximately 8.5% of the Project Manager's hours, approximately 18.5% of the Specifications Writer's hours, and approximately 7% of the Construction Administrator's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Principal Architect	2	\$190.00
Project Manager	10	\$190.00
Construction Administrator	12	\$90.00
Specifications Writer	2,4	\$150.00

There is no travel associated with this task.

## TASK 13 REQUEST FOR BIDS

The THC Project Manager will prepare an advertisement for bid and post it accordingly. The THC Project Manager will consult with the Monroe County Attorney's office and Airport Noise Program Coordinator as necessary, and assure that the advertisement meets with all Monroe County requirements. The bid advertisement will be reviewed by the THC Director of Sound Insulation Programs.

For THC, this task includes approximately .5% of the Director of Sound Insulation Program's hours, approximately 1.5% of the Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Director SIP	2	\$182.00
Project Manager	16	\$102.00
Director of Administrative Services	4	\$102.00

For MDA, this task includes approximately 3.5% of the Project Manager's hours, and the remaining 3.5% of the Specifications Writer's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours.	Hourly Rate
Project Manager	4	\$190.00
Specifications Writer	4	\$150.00

There is no travel associated with this task.

#### TASK 14 CONDUCT PRE-BID CONFERENCE

The THC Consultant team will hold a mandatory Pre-Bid Conference prior to the bid openings. This will provide all pre-qualified contractors the opportunity to ask questions regarding the project and discuss the site conditions. Any necessary revisions and/or addenda to the Bid Documents will be prepared, along with responses to questions, and will be distributed to all bidders in accordance with the procedures described in the Bid Documents. Bid forms will be simplified as much as possible without compromising the ability to evaluate the bids received. The THC Director of Sound Insulation Programs, Project Manager, the MDA Project Manager and The SUN Group Principal Architect will attend the Pre-Bid Conference.

For THC, this task includes approximately 3% of the Director of Sound Insulation Program's hours, approximately 2.5% of the Project Manager's hours, and approximately 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Director SIP	16	\$182.00
Project Manager	32	\$102.00
Director of Administrative Services	4	\$102.00

For The SUN Group, this task includes approximately 4% of the Principal Architect's hours. The summary of hours for this task is as follows:

Summary of Hours - SUN GROUP

Position	Hours	Hourly Rate
Principal Architect	16	\$130.00

For MDA, this task includes approximately 20% of the Project Manager's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Project Manager	24	\$190.00

This task will require a trip by the THC Project Manager, the MDA Project Manager and Director of Sound Insulation Programs to attend the Pre-Bid Conference. The THC Project Manager will spend three (3) nights and four (4) days in Key West during this period. The additional time will be to attend to any homeowner concerns and questions, and various project management tasks. The THC Director of Sound Insulation Programs will spend one (1) night and two (2) days in Key West for this task, to primarily attend the Pre-Bid Conference only. The MDA Project Manager will spend two (2) nights and three (3) days on Key West for this task. The SUN Group Principal

Architect will also travel to Key West for the Pre-Bid Conference by automobile for a one (1) night, two (2) day stay.

Travel Summary for this Task

Company	Position	No. of Trips
THC	Project Manager	1
THC	Director of Sound Insulation Programs	1
MDA	Project Manager	1
SUN Group	Principal Architect (by automobile)	1

#### TASK 15 OPEN AND EVALUATE BIDS

The Bids will be opened by the County in accordance with their established procedure. The County Attorney will review and certify the Bid process. The County will forward copies of all bids to the THC Project Manager for review and recommendation for award.

The THC Project Manager, The SUN Group Principal Architect, the MDA Project Manager and the MDA Construction Administrator will analyze the bids for compliance with the Bid Documents and to determine the lowest cost and best-qualified bidder. The results of the analysis will be tabulated and a recommendation for award of the contract will be submitted to the Airport Noise Program Coordinator by the THC Director of Sound Insulation Programs.

For THC, this task includes the remaining 1% of the Director of Sound Insulation Program's hours, the remaining 2.5% of the Project Manager's hours, and the remaining 7% of the Director of Administrative Services hours. The summary of hours for this task is as follows:

Summary of Hours - THC

Position	Hours	Hourly Rate
Director SIP	4	\$182.00
Project Manager	8	\$102.00
Director of Administrative Services	4	\$102.00

For MDA, this task includes the remaining 4% of the Project Manager's hours and the remaining 5.5% of the Construction Administrator's hours. The summary of hours for this task is as follows:

Summary of Hours - MDA

Position	Hours	Hourly Rate
Project Manager	5	\$190.00
Construction Administrator	9	\$90.00

For The SUN Group, this task includes the remaining 2% of the Principal Architect's hours. The summary of hours for this task is as follows:

Summary of Hours - SUN GROUP

Position	Hours	Hourly Rate
Principal Architect	8	\$130.00

There is no travel associated with this task.



#### INDEPENDENT KOST ESTIMATES

P. O. Box 46681 St. Pete Beach Florida 33741

(727) 367-291(

July 18, 2005

Ms. Bevette Moore **Business Coordinator** Airports Business Office 3491 S. Roosevelt Boulevard Key West, Florida 33040

Subject: Key West International Airport

Consultant Fee Assessment

Dear Ms. Monre:

Attached is my assessment of the consultant fees for the proposed AIP Project (Phase 5 - Design Phase, Implementation of Noise Insulation Program) at Key West International Airport. This estimate covers all tasks which are included in the scope of services for this project.

The estimated consultant fee for the proposed project is \$661,580.

l am also attaching an invoice for \$900 for my services.

Please do not hesitate to call should you have any questions regarding my assessment.

Thank you for giving me the opportunity to prepare this estimate. If I can be of any service in the future, please let me know.

Sincerely,

Ikars (Ike) A. Cakarnis Airport Engineer

Attachments

\$661,580

## KEY WEST INTERNATIONAL AIRPORT PHASE 5 - DESIGN PHASE, INPLEMENTATION OF NOISE INSULATION PROGRAM

#### INDEPENDENT COST ESTIMATE

## SUMMARY OF CONSULTANT FEE ESTIMATE

TOTAL

a a	Project Management	\$ 157,340
2.	Provide Support to the Office & Provide	
	Information to the Public as Required	\$ 7,210
3.	Update Program Policies	\$ 7,980
4.	Contractor Outreach & Training	\$ 21,980
5.	Legal Document Administration	\$ 38,100
6.	Construction Specification Revision	\$ 19,010
7.	Product Review	\$ 8,860
8.	Document Architectural, Mechanical,	
	Ventilation & Electrical Site Conditions	\$ 99,730
9.	Perform Pre-Modification Noise Audit	\$ 13,550
10.	Develop Acoustic Design Package	\$ 76,540
11.	Design Review With Homeowners	\$ 43,120
12.	Develop Bid Documents	\$ 46,400
13.	Request for Bids	\$ 5,170
14.	Conduct Pre-Bid Conference	\$ 13,220
15.	Open and Evaluate Bids	\$ 6,400
16.	Direct Costs	\$ 96,970
	•	

## 1. Project Management

	<u>Hours</u>	<u>Rate</u>	Cost
Principal (THC)	40	\$ 250	\$10,000
Director SIP	424	182	77,168
Project Manager	600	102	61,200
Asst. Project Manager	120	68	8,160
Director Adm. Services	8	102	816

TOTAL

\$ 157,340

# 2. Provide Support to the Office & Provide Information to the Public as Required

Project Manager (THC)	40	\$ 102	\$ 4,080
Asst. Project Manager	40	68	2,720
Director Admin. Services	4	102	408

TOTAL

\$ 7,210

## 3. Update Program Policies

Director SIP (THC)	24	\$ 1	82	\$ 4,368
Project Manager	8	- in Specimen	02	816
Asst. Project Manager	4		68	272
Director Asst. Services	4	1	02	408
Ventilation Engineer (CEE)	8	- 1	50	1,200
Ventiliation Manager	8	4	15	920

TOTAL

7,980

## 4. Contractor Outreach & Training

Director SIP (THC)	32	\$	182	\$	5,824
Project Manager	40	*	102	*	4,080
Asst. Project Manager	24		68		1,632
Director Admin. Services	4		102		408
Ventilation Engineer (CEE)	16	,	150		2,400
Ventilation Manager	40		115	,	4,600
Project Manager (MDA)	16		190	•	3.040

TOTAL

\$ 21,980

## 5. Legal Document Administration

	Proj. Mgr. (THC) Asst. Project Manager Director Admin. Services First American Title Insu		CO.	Rate 102 68 102		Cost 612 4,080 408 33,000	•	
	TOTAL						\$	38,100
6.	Construction Specific	atio	n Re	vision			,	
	Director SIP (THC) Project Manager Director Admin. Services Principal Architect (MDA Project Manager Construction Admin. Specifications Writer		\$	182 102 102 175 190 90	\$	728 408 408 350 1,520 3,600		estar.
	TOTAL						\$	19,010
7.	Product Review			į				
	Project Manager (THC) Director Admin. Services Project Manager (MDA) Construction Admin. Specifications Writer TOTAL	4 24 32 4	\$	102 102 190 90 150	\$	408 408 4,560 2,880 600		8.860
	IOIML		_				*	0,00V
8.	Document Architectur & Electrical Site Cond			mical,	Ven	itilation		

Project Manager (THC) 300	\$ 102	\$ 30,600
Asst. Project Manager 40	68	2,720
Director Admin. Services 4	. 102	408
Assistant Architect (SUN)300	60	; 18,000
Mechanical Engineer 240	100	24,000
Ventilation Tech. (CEE) 240	100	24,000

TOTAL.

99,730

### 9. Perform Pre-Modification Noise Audit

	Ho	<u> ZUIS</u>	<u>Rate</u>		Cost
Senior Consultant	(L&B)	4	\$ 205	\$	820
Consultant		90	140	Sec.	2,600
Admin. Assistant		2	65		130

TOTAL

\$ 13,550

## 10. Develop Acoustic Design Package

Project Manager (THC)	24	102	2,448
Director Admin. Services	4	102	408
Principal Architect (SUN	08 (	130	10,400
Assistant Architect	240	60	14,400
CADD Technician	400	42	16,800
Mechanical Engineer	60	100	6,000
Ventilation Engineer(CEE	32	150	4,800
Ventilation Manager	40	115	4,600
Ventilation Technician	16	100	1,600
Senior Consultant (L&B)	2	205	410
Consultant	4	140	560
Admin. Assistant	2	65	130
Principal Architect (MDA	) 4	175	700
Project Manager	32	190	6,080
Construction Admin.	60	90	5,400
Specification Writer	12	150	1,800

TOTAL

\$ 76,540

## 11. Design Review With Homeowners

Project Manager (THC)	128	\$ 102	\$ 13,056
Asst. Project Manager	40	68	2,720
Director Admin. Services	4	102	408
Prin. Architect (SUN)	180	130	23,400
Assistant Architect	30	60	1,800
Clerical Support	16	30	480
CADD Technician	30	42	1,260

TOTAL

\$ 43,120

## 12. Develop Bid Documents

Director SIP (THC) Project Manager Director Admin. Services Prin. Architect (SUN) Mechanical Engineer Assistant Architect CADD Technician Prin. Architect (MDA) Project Manager Construction Admin. Specification Writer	Hours 2 4 60 240 30 120 2 8 12 24	\$	Rate 182 102 102 130 100 60 42 190 190 90	\$	Cost 364 408 408 7,800 24,000 1,800 5,040 380 1,520 1,080 3,600	,	46,400
13. Request For Bids							70,700
Director SIP (THC) Project Manager Director Admin. Services Project Manager (MDA) Specifications Writer	2 20 4 4		182 102 102 190 150	\$	364 2,040 408 760 600		
TOTAL						\$	5,170
14. Conduct Pre-Bid Conf	eren	ce					
Director SIP (THC) Project Manager Director Admin. Services Project Manager (MDA) Prin. Architect (SUN)	16 32 4 24	\$	182 102 102 190 130	\$	2,912 3,264 408 4,560 2,080		
TOTAL							13,220
15. Open and Evaluate Bid	\$						
Director SIP (THC) Project Manager Director Admin. Services Project Manager (MDA) Construction Admin. Prin. Architect (SUN)	4 32 4 4 8	\$	182 102 102 190 90	•	728 3,264 408 760 720 520		
TOTAL						\$	6,400

## 16. Direct Costs

## A. Transportation1) Airline Tickets

Atlanta-Key West (THC) 16 x \$ 750 = \$ 12,000 Minneapolis-Key West (MDA) 5 x 1,400 = 7,000 Minneapolis - Key West (CEE) 8 x 1,400 = 11,200 Boston - Key West (L&B) 2 x 750 = 1,500 Sub-Total	\$	31,700
2) POV	Ť	
West Palm Beach - Key West 10 trips x \$250/trip	\$	2,500
3) Rental Car & Rental Van 173 days x \$40/day = \$6,920 3 days x \$70/day = 210 Total	\$	7,130
4) Parking At Atlanta 117 days x\$ 9/day=\$1.053		
At Minneapolis55 days x\$14/day= 770 Total	\$	1,820
Total Transportation	\$	43,150
Lodging 208 nights x \$140/night	\$	29,120
Per Diem 255 days x \$40/day	\$	10,200
Telephone/FAX	\$	4,000
Postage/Federal Express	\$	800
Printing	\$	4,000
Monitors forEach House 60 x \$45	\$	2,700
Noise Testing Equipment (L&B)	\$	500
Miscellaneous	\$	2,500
TOTAL DIRECT COSTS	\$	96,970
	Minneapolis-Key West (MDA) 5 x 1,400 = 7,000 Minneapolis - Key West (CEE) 8 x 1,400 = 11,200 Boston - Key West (L&B) 2 x 750 = 1,500 Sub-Total  2) POV West Palm Beach - Key West 10 trips x \$250/trip  3) Rental Car & Rental Van 173 days x \$40/day = \$6,920 3 days x \$70/day = 210 Total  4) Parking At Atlanta 117 days x\$ 9/day=\$1,053 At Minneapolis55 days x\$14/day= 770 Total  Total Transportation  Lodging 208 nights x \$140/night  Per Diem 255 days x \$40/day  Telephone/FAX  Postage/Federal Express  Printing  Monitors forEach House 60 x \$45  Noise Testing Equipment (L&B)  Miscellaneous	Minneapolis-Key West (MDA) 5 x 1,400 = 7,000 Minneapolis - Key West (CEE) 8 x 1,400 = 11,200 Boston - Key West (L&B) 2 x 750 = 1,500 Sub-Total \$  2) POV West Palm Beach - Key West 10 trips x \$250/trip \$  3) Rental Car & Rental Van 173 days x \$40/day = \$6,920 3 days x \$70/day = 210 Total \$  4) Parking At Atlanta 117 days x\$ 9/day=\$1,053 At Minneapolis55 days x\$14/day= 770 Total \$  Total Transportation \$  Lodging 208 nights x \$140/night \$  Per Diem 255 days x \$40/day \$  Telephone/FAX \$  Postage/Federal Express \$  Printing \$  Monitors forEach House 60 x \$45  Noise Testing Equipment (L&B) \$  Miscellaneous \$